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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHU, DAVID H

ART UNIT	PAPER NUMBER
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2628

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,433	Applicant(s) HARMAN, ROBERT M.	
	Examiner David H. Chu	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Acknowledgment is made of the amendment filed by the applicant on 07/19/2006, in which:
2. The applicant traversed all the outstanding objections and rejections.
3. Claims 1-16 are currently pending in U.S. Application Serial No. 10/814,433 and an Office Action on the merits follows.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seni et al. (PGPUB Document No. US 203/0007018), further in view of Bott et al. ("Using Microsoft Office 2000").**

7. Note with respect to claim 1,

8. Seni et al. teaches:

9. **A reduced keypad 132 (FIG.2);**

10. It is inherent that a PDA comprise of a **processor**.

11. Further, it is inherent for a computer system device, such as the handheld device 100 (FIG 1) of reference Seni, to include an **input buffer** for any input device such as a reduced keypad, as Seni teaches an input buffer for handwritten word using a stylus pen.

Art Unit: 2628

12. However, Seni et al. does not expressly teach:

13. **A display buffer.**

14. It is well known in the art to use a display buffer for a device with a screen to enable simultaneous display of data transmitted to the screen.

15. Further, Seni et al. teaches that the device runs under operating systems such as, Windows CE from Microsoft Corporation.

16. Therefore, it would have been obvious to one of an ordinary skill in the art to utilize a display buffer to a PDA device with a screen, because this will allow efficient rendering of simultaneous objects for a handheld device running under any operating system.

17. Further Seni et al. does not expressly teach the above device:

18. Entering **character codes** and **intermediate codes**;

19. **Changing intermediate codes into character code sequences.**

20. Bott et al. teaches:

21. In Microsoft Word, creating a new entry to the AutoCorrect list (pg 267, "Entering Text and Graphics Automatically with AutoText and AutoCorrect"). Once a new entry

has been created, the user can assign customizable shortcut keys (pg 56, "Bypassing Menus with Keyboard Shortcuts").

22. The shortcut key is the equivalent to an **intermediate code**, wherein the input character code corresponding to the shortcut key is stored in the input buffer when the user types the shortcut key combination. Upon completion of entering the shortcut key, the character code corresponding to the shortcut key changes to the AutoText character code.

23. For example, the user may assign "ctrl+m" as the shortcut key for "Mask," wherein "ctrl+m" is the **intermediate code** and the corresponding assigned word "Mask" is the **character code sequence**, as recited by applicant.

24. Therefore, it would have been obvious to one of an ordinary skill in the art to apply the AutoText teachings of Bott et al. to the handheld device of Seni et al., because this will enable the user input characters that do not appear on the reduced keypad/keyboard.

25. Note with respect to claim 2, 3 and 4,

26. Seni et al. and Bott et al. does not expressly teach:

27. The intermediate codes comprise a Ligature intermediate code / Explicit Virama intermediate code and Half-character intermediate code.

28. It is well known in the art to assign shortcut keys (hotkey) to symbols or characters that are difficult to type.

29. Therefore, it would have been obvious to one of an ordinary skill in the art to assign a Ligature/Explicit Virama/Half-Character when creating a new entry for the AutoText teachings of Bott et al., because this will allow add customization to the user for creating documents.

30. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seni et al., in view of Bott et al. as applied to claims 1-4 above, and further in view of Laukkanen (U.S. Patent No. 6,934,564).

31. Note with respect to claim 5,

32. The teachings of Seni et al. and Bott et al. does not expressly teach:

33. A display engine, coupled to the display buffer, for processing character codes and character code sequences for display.

34. Laukkanen et al. teaches:

35. A **Display engine** 130C that is responsible for correctly forming images on the display 140 of the characters that makes up the writing (FIG 1) (col.5, line 55-57).

36. Note with respect to claim 6,

37. Laukkanen et al. teaches a **Display screen** 140 (FIG. 1).

38. Note with respect to claim 7,

39. Components of Seni et al and Laukkanen et al. have been discussed above with respect to claims 1, 5 and 6.

40. Further Bott et al. teaches:

41. The AutoCorrect function of Microsoft Word that corrects misspelled words (pg 101-108, "Using AutoCorrect to Automate Documents").

42. A user may type:

43. "Librar" as the first character;

44. "i" as the next character.

45. The AutoCorrect function of Microsoft Word will change the "i" to a "y" because of the preceding characters "Librar."

46. This is the equivalent to **changing an intermediate code into one or more character codes depending on any preceding character code that precedes the intermediate code**, wherein "i" is the intermediate character code.

Art Unit: 2628

47. Note further, the typing of a character code "." to activate the AutoCorrect function has not affect on how the intermediate character code "i" changes. Clearly, the intermediate code "i" changes depending on the preceding character code "Librar" not the character code ".".

48. Note with respect to claim 8,

49. Bott et al. teaches:

50. The AutoCorrect function as described above.

51. A user may type:

52. "Acti" as the first character sequences;

53. "n" as the next character.

54. The AutoCorrect function of Microsoft Word will change the "e" to a "o" because of the following character "n."

55. This is the equivalent to **changing the intermediate code "e" into one or more character codes "o" depending on any following character code "n." that follows the intermediate code**, as recited by applicant.

56. Note with respect to claim 9,

57. Refer to claim rejection 1 discussed above.

58. Note with respect to claim 10, claim 10 is similar in scope to the claims 7 and 8, thus the rejections to claims 7 and 8 hereinabove are also applicable to claim 10.

59. "Acti" is the first character code sequence;

60. "e" is the intermediate code;

61. "n." is the second character code sequence.

62. As described above, the intermediate code "e" changes into "o".

63. Therefore the above is the equivalent to:

64. Changing **the intermediate code** ["e"] to one or more **character codes** ["o"];

65. Displaying one or more characters represented by the **first character code sequence** ["Acti"], the one or more **character codes** ["o"], and the **second character code sequence** ["n."].

Response to Arguments

66. Applicant's arguments filed 7/19/2006 have been fully considered but they are not persuasive.

67. Note with respect to claims 1-6,

The applicant argues:

- a) Input buffer of the Seni reference is used for handwriting recognition and is not linked to the keypad of Seni.

*[Reference Seni, teaches a **reduced keypad** 132 (FIG 2). It is **inherent** for a computer system device, such as the handheld device 100 (FIG 1) of reference Seni, to include an **input buffer** for any input device such as a reduced keypad, as Seni teaches an input buffer for handwritten word using a stylus pen.]*

- b) The AutoCorrect feature in Word, in accordance with reference Bott, only changes the **intermediate code** ("tpfp") after a Spacebar, Enter Key or any punctuation mark is pressed.

[The examiner applied the "customizable shortcut keys" (pg 56, "Bypassing Menus with Keyboard Shortcuts) with the AutoCorrect list (pg 256, "Entering Text and Graphics Automatically with AutoText and AutoCorrect") to create a shortcut key for any user defined character/word. For example, the user may assign

"ctrl+m" as the shortcut key for "Mask," wherein "ctrl+m" is the intermediate code and the corresponding assigned word "Mask" is the character code sequence, as recited by applicant]

68. Note with respect to claim 7,

The applicant argues:

- a) The erroneous ending "i" in "library" is only changed to a "y" after a Spacebar, Enter key or any other punctuation mark is pressed.

[Any punctuation mark such as a period is the equivalent to a following character code (or part of a sequence of character codes). Therefore, "librar" is the preceding character code, "i" is the intermediate character code and the "." is the following character code. As a result, the intermediate character code "i" changes to a "y" after typing the following character code ".".]

Correcting the word "actien" to "action" is another example, wherein "acti" is the preceding character code, "e" is the intermediate character code, and "n." is the following character code.]

69. Note with respect to claim 10,

Art Unit: 2628

The applicant argues:

- a) According to reference Bott, typing "actien" does not change the "e" to an "o" as long as Spacebar, Enter key or any punctuation mark is not pressed.

[Refer to the examiner's response to argument above with respect to claim 7. Further, the "." and "n." of the respective examples above are the equivalent to the second character code, as recited by applicant.]

Conclusion

70. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

71. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


72. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Chu whose telephone number is (571) 272-8079. The examiner can normally be reached on M-TH 9:00am - 7:30pm.

73. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark k. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2628

74. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DHC


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